If a warning light turns on or a warning buzzer sounds...

Calmly perform the following actions if any of the warning lights comes on or flashes. If a light comes on or flashes, but then goes off, this does not necessarily indicate a malfunction in the system.

Stop the vehicle immediately. Continuing to drive the vehicle may be dangerous.

The following warning indicates a possible problem in the brake system. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning light	Warning light/Details
BRAKE (U.S.A.) (!) (Canada)	**Brake system warning light (warning buzzer)*** • Low brake fluid • Malfunction in the brake system This light also comes on when the parking brake is not released. If the light turns off after the parking brake is fully released the system is operating normally.

*: **Parking brake engaged warning buzzer**

→P. 556

Stop the vehicle immediately.

The following warning indicates the possibility of damage to the vehicle that may lead to an accident. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning light	Warning light/Details
	Charging system warning light Indicates a malfunction in the vehicle's charging system

Have the vehicle inspected by your Lexus dealer immediately.

Failing to investigate the cause of the following warnings may lead to the system operating abnormally and possibly cause an accident. Have the vehicle inspected by your Lexus dealer immediately.

Warning light	Warning light/Details
CHECK (U.S.A.) (Canada)	**Malfunction indicator lamp** Indicates a malfunction in: • The electronic engine control system; • The electronic throttle control system; or • The electronic automatic transmission control system
	SRS warning light Indicates a malfunction in: • The SRS airbag system; • The front passenger occupant classification system; or • The seat belt pretensioner system
ABS (U.S.A.) ABS (Canada)	**ABS warning light** Indicates a malfunction in: • The ABS; or • The brake assist system
!	**Electric power steering system warning light** Indicates a malfunction in the EPS (Electric Power Steering) system
PCS	**Pre-collision system warning light (if equipped)** Indicates a malfunction in the pre-collision system

Follow the correction procedures.

After taking the specified steps to correct the suspected problem, check that the warning light goes off.

Warning light	Warning light/Details	Correction procedure
	Open door warning light (warning buzzer)*1 Indicates that one or more of the doors is not fully closed.	Check that all the doors are closed.
	Low fuel level warning light Indicates remaining fuel is approximately 2.8 gal. (10.7 L, 2.4 Imp. gal.) or less	Refuel the vehicle.
(On the instrument panel)	**Driver's seat belt reminder light (warning buzzer)*2** Warns the driver to fasten his/her seat belt.	Fasten the seat belt.
(On the center panel)	**Front passenger's seat belt reminder light (warning buzzer)*2** Warns the front passenger to fasten his/her seat belt.	Fasten the seat belt.
	Master warning light A buzzer sounds and the warning light comes on and flashes to indicate that the master warning system has detected a malfunction.	→P. 550

Warning light	Warning light/Details	Correction procedure
	Tire pressure warning light	
	When the light comes on: Low tire inflation pressure.	Adjust the tire inflation pressure.
	When the light comes on after flashing for 1 minute: Malfunction in the tire pressure warning system.	Have the system checked by your Lexus dealer.

*1: Open door warning buzzer:

The open door warning buzzer sounds to alert one or more of the doors is not fully closed (with the vehicle having reached a speed of 3 mph [5 km/h]). (→P. 556)

*2: Driver's and front passenger’s seat belt buzzer:

The driver’s and front passenger’s seat belt buzzer sounds to alert the driver and front passenger that his or her seat belt is not fastened. The buzzer sounds intermittently for 10 seconds after the vehicle reaches a speed of 12 mph (20 km/h). Then, if the seat belt is still unfastened, the buzzer will sound in a different tone for 20 more seconds.

■SRS warning light

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, “AIR BAG ON” indicator light, “AIR BAG OFF” indicator light, front passenger's seat belt buckle switch, seat belt pretensioner assemblies, inflators, interconnecting wiring and power sources. (→P. 107)

■Front passenger detection sensor, passenger seat belt reminder and warning buzzer

- If luggage is placed on the front passenger seat, the front passenger detection sensor may cause the warning light to flash and the warning buzzer to sound even if a passenger is not sitting in the seat.
- If a cushion is placed on the seat, the sensor may not detect a passenger, and the warning light may not operate properly.

■Electric power steering warning light

When the voltage is low or drops, the power steering warning light may come on.

If the malfunction indicator lamp comes on while driving

First check the following:

- Is the fuel tank empty?
  If it is, fill the fuel tank immediately.
- Is the fuel tank cap loose?
  If it is, tighten it securely.

The lamp will go off after several driving trips.
If the light does not go off even after several trips, contact your Lexus dealer as soon as possible.

When the tire pressure warning light comes on

Check the tire inflation pressure and adjust to the appropriate level. Pushing the tire pressure warning reset switch will not turn off the tire pressure warning light.

The tire pressure warning light may come on due to natural causes

The tire pressure warning light may come on due to natural causes such as natural air leaks and tire inflation pressure changes caused by temperature. In this case, adjusting the tire inflation pressure will turn off the warning light (after a few minutes).

When a tire is replaced with a spare tire

▶ Vehicles with a compact spare tire

The compact spare tire is not equipped with a tire pressure warning valve and transmitter. If a tire goes flat, the tire pressure warning light will not turn off even though the flat tire has been replaced with the spare tire. Replace the spare tire with the repaired tire and adjust the tire inflation pressure. The tire pressure warning light will go off after a few minutes.

▶ Vehicles with a full-size spare tire

The spare tire is also equipped with the tire pressure warning valve and transmitter. The tire pressure warning light will turn on if the tire inflation pressure of the spare tire is low. If a tire goes flat, even though the flat tire is replaced with the spare tire, the tire pressure warning light does not turn off. Replace the spare tire with the repaired tire and adjust the proper tire inflation pressure. The tire pressure warning light will turn off after a few minutes.

If the tire pressure warning system is not functioning

The tire pressure warning system will be disabled in the following conditions:

(When the condition becomes normal, the system will work properly.)

- If tires not equipped with tire pressure warning valves and transmitters are used
- If the ID code on the tire pressure warning valves and transmitters is not registered in the tire pressure warning computer
- If the tire pressure warning select switch is set to a different tire setting.
- If the tire inflation pressure is 73 psi (500 kPa, 5.1 kgf/cm^2 or bar) or higher

The tire pressure warning system may be disabled in the following conditions:

(When the condition becomes normal, the system will work properly.)

- If electronic devices or facilities using similar radio wave frequencies are nearby
- If a radio set at similar frequencies is in use in the vehicle
- If a window tint that affects the radio wave signals is installed
- If there is a lot of snow or ice on the vehicle, in particular around the wheels or wheel housings
- If non-genuine Lexus wheels are used (Even if you use Lexus wheels, the tire pressure warning system may not work properly with some types of tires.)
- If tire chains are used
- If the full-size spare tire is in a location subject to poor radio wave signal reception.
- If a large metallic object which can interfere with signal reception is put in the luggage compartment (vehicles with full-size spare tire).

If the tire pressure warning light comes on after flashing frequently for 1 minute

If the tire pressure warning light comes on after flashing frequently for 1 minute when the “ENGINE START STOP” switch is turned to IGNITION ON mode, have it checked by your Lexus dealer.

Customization

The vehicle speed linked seat belt reminder buzzer can be disabled.
(Customizable features →P. 625)

CAUTION

■ **When the power steering warning light comes on**

The steering wheel may become extremely heavy.
If the steering wheel becomes heavier than usual when operating, hold firmly and operate it using more force than usual.

■ **If the tire pressure warning light comes on**

Be sure to observe the following precautions. Failure to do so could cause loss of vehicle control and result in death or serious injury.

- Stop your vehicle in a safe place as soon as possible. Adjust the tire inflation pressure immediately.
- If the tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. Check the tires. If a tire is flat, change it with the spare tire and have the flat tire repaired by the nearest Lexus dealer.
- Avoid abrupt maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes.

■ **If a blowout or sudden air leakage should occur**

The tire pressure warning system may not activate immediately.

CAUTION

Maintenance of the tires

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label (tire and load information label). (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label [tire and load information label], you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS-tire pressure warning system) that illuminates a low tire pressure telltale (tire pressure warning light) when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale (tire pressure warning light) illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS (tire pressure warning system) is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale (tire pressure warning light).

Your vehicle has also been equipped with a TPMS (tire pressure warning system) malfunction indicator to indicate when the system is not operating properly. The TPMS (tire pressure warning system) malfunction indicator is combined with the low tire pressure telltale (tire pressure warning light). When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended.

TPMS (tire pressure warning system) malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS (tire pressure warning system) from functioning properly. Always check the TPMS (tire pressure warning system) malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS (tire pressure warning system) to continue to function properly.

NOTICE

■ **Precaution when installing a different tire**

When a tire of a different specification or maker is installed, the tire pressure warning system may not operate properly.

If a warning message is displayed

If a warning is shown on the multi-information display, stay calm and perform the following actions:

1 Master warning light

The master warning light also comes on or flashes in order to indicate that a message is currently being displayed on the multi-information display.

2 Multi-information display

If any of the warning lights comes on again after the following actions have been performed, contact your Lexus dealer.

Stop the vehicle immediately. Continuing to drive the vehicle may be dangerous.

The following warning indicates a possible problem in the brake system. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning message	Details
BRAKE MALFUNCTION	**Indicates the following:** • The brake fluid level is low; or, • The brake system is malfunctioning. A buzzer also sounds.

Stop the vehicle immediately.

A buzzer sounds and a warning message is shown on the multi-information display. The following warning indicates the possibility of damage to the vehicle that may lead to an accident. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning message	Details
ENGINE OIL PRESSURE LOW	**Indicates abnormal engine oil pressure** The warning light may come on if the engine oil pressure is too low.
AWD OVERHEAT (Flashes) (If equipped)	**Indicates the AWD system has overheated**

Have the vehicle inspected by your Lexus dealer immediately.

A buzzer sounds and a warning message is shown on the multi-information display. Failure to investigate the cause of the following warnings may lead to the system operating abnormally and possibly cause an accident. Have the vehicle inspected by your Lexus dealer immediately.

Warning message	Details
CHECK AWD SYSTEM (If equipped)	Indicates a malfunction in the AWD system
HIGH TRANSMISSION FLUID TEMP.	Indicates that the automatic transmission fluid temperature is too high
CHECK BRAKE LAMP SYSTEM	Indicates a malfunction in the brake lights system
CHECK STEERING LOCK SYSTEM	Indicates a malfunction in the steering lock system

Warning message	Details
CHECK AIR SUSPENSION SYSTEM (If equipped)	**Indicates a malfunction in the electronically modulated air suspension system**
CHECK AFS SYSTEM AFS OFF (Flashes) (If equipped)	**Indicates a malfunction in the adaptive front lighting system**
CHECK PCS SYSTEM (If equipped)	**Indicates a malfunction in the pre-collision system**
CHECK SONAR (If equipped)	**Indicates a malfunction in the intuitive parking assist** The malfunctioning assist-sensor is flashing.

Warning message	Details
CHECK CRUISE CONTROL SYSTEM (Flashes) or (Flashes) (If equipped)	**Indicates a malfunction in the radar cruise control system** Stop the vehicle in a safe place. Turn the "ENGINE START STOP" switch off and then turn it to IGNITION ON mode again to reset the cruise control system.
CHECK HEADLIGHT LEVELING SYSTEM (If equipped)	**Indicates a malfunction in the automatic headlight leveling system**
CHECK SRS SYSTEM AIRBAG	**Indicates a malfunction in:** • The SRS airbag system; • The front passenger occupant classification system; or, • The seat belt pretensioner system
CHECK ABS	**Indicates a malfunction in:** • The ABS; or, • The brake assist system

Warning message	Details
CHECK POWER STEERING SYSTEM	Indicates a malfunction in the EPS (Electric Power Steering) system

Follow the correction procedures.

A buzzer sounds and a warning message is shown on the multi-information display. After taking the specified steps to correct the suspected problem, check that the warning message goes off.

Warning message	Details	Correction procedure
	Indicates that one or more of the doors is not fully closed The system also indicates which doors are not fully closed. If the vehicle reaches a speed of 3 mph (5 km/h), a buzzer sounds to indicate that the door(s) are not yet fully closed.	Make sure that all the doors are closed.
HOOD OPEN	**Indicates that the hood is not fully closed** If the vehicle reaches a speed of 3 mph (5 km/h), a buzzer sounds to indicate that the hood is not yet fully closed.	Close the hood.

Warning message	Details	Correction procedure
BACK OPEN	**Indicates that the back door is not fully closed** If the vehicle reaches a speed of 3 mph (5 km/h), a buzzer sounds to indicate that the back door is not yet fully closed.	Close the back door.
MOONROOF OPENED (Flashes) (If equipped)	**Indicates that the moon roof is not fully closed (with the "ENGINE START STOP" switch off, and the driver's door open)**	Close the moon roof.
RELEASE PARKING BRAKE	**Indicates that the parking brake is still engaged** If the vehicle reaches a speed of 3 mph (5 km/h), flashes and a buzzer sounds to indicate that the parking brake is still engaged.	Release the parking brake.
LOW WASHER FLUID	**Indicates that the washer fluid level is low**	Add washer fluid.

Warning message	Details	Correction procedure
OIL MAINTENANCE REQUIRED SOON (U.S.A. only)	Indicates that the engine oil is scheduled to be changed	Check the engine oil, and change if necessary.
	Comes on approximately 4500 miles (7200 km) after the engine oil is changed. (The indicator will not work properly unless the oil maintenance data has been reset.)	
OIL MAINTENANCE REQUIRED (U.S.A. only)	Indicates that the engine oil and oil filter should be changed	Have the engine oil and oil filter checked and changed by your Lexus dealer.
AWD DISABLED (Flashes) (If equipped)	Indicates that the AWD system is not currently functional A buzzer also sounds.	Reduce vehicle speed or stop the vehicle in a safe place until the warnings clear. In this case, do not stop the engine.
PCS TEMPORARILY NOT AVAILABLE (If equipped)	Indicates that the pre-collision system is not currently functional	Clean the grille and the sensor. This message appears when the pre-collision system is hot. In this case, wait until the system cools down.

Warning message	Details	Correction procedure
CLEAN SONAR (If equipped)	**Indicates that intuitive parking assist is dirty or covered with ice** A buzzer also sounds.	Clean the sensor.
CLEAN RADAR SENSOR (Flashes) (If equipped)	**Indicates that the radar cruise control sensor is dirty or covered with ice** A buzzer also sounds.	Clean the sensor.
CRUISE CONTROL NOT AVAILABLE (Flashes) (If equipped)	**Indicates that the radar cruise control system is unable to judge vehicle-to-vehicle distance** A buzzer also sounds.	If the windshield wipers are on, turn them off or set them to a mode other than "AUTO" or high speed wiper operation.
100 MPH SET (Flashes) (If equipped)	**Indicates that your vehicle is nearing the vehicle ahead (in radar cruise mode)** At the same time, will appear on the head-up display.	Slow the vehicle by applying the brakes.

Warning message	Details	Correction procedure
ENGINE OVERHEAT	**Indicates that the engine has overheated** A buzzer also sounds.	Stop and check. (→P. 592)
LOW FUEL	**Indicates that remaining fuel is approximately 2.8 gal. (10.7 L, 2.4 Imp. gal.) or less**	Refuel the vehicle.

Have the malfunction repaired immediately.

After taking the specified steps to correct the suspected problem, check that the warning message and light go off.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Sounds once	—	KEY NOT DETECTED (Flashes)	The electronic key is not detected when an attempt is made to start the engine.	Confirm the location of the electronic key.
Sounds once	Sounds 3 times	KEY NOT DETECTED (Flashes)	The electronic key was carried outside the vehicle and a door other than the driver's door was opened and closed while the “ENGINE START STOP” switch was in a mode other than off.	Bring the electronic key back into the vehicle.
			The driver's door was opened and closed while the electronic key was not in the vehicle, the shift lever was in P and the “ENGINE START STOP” switch was not turned off.	Turn the “ENGINE START STOP” switch off or bring the electronic key back into the vehicle.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Sounds once	Sounds once	KEY NOT DETECTED TURN POWER OFF (Displayed alternately) (Flashes)	An attempt was made to exit the vehicle with the electronic key and lock the doors without first turning the "ENGINE START STOP" switch off.	Turn the "ENGINE START STOP" switch off and lock the doors again.
Sounds once	—	KEY NOT DETECTED (Flashes)	An attempt was made to start the engine without the electronic key being present, or the electronic key was not functioning normally. An attempt was made to drive when the regular key was not inside the vehicle.	Confirm that the electronic key is inside the vehicle.
Continuous	—	SHIFT TO P RANGE (Flashes)	The driver's door was opened when the shift lever was not in P and the "ENGINE START STOP" switch was not turned off.	Shift the shift lever to P.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Con-tinuous	Con-tinuous	SHIFT TO P RANGE KEY NOT DETECTED (Displayed alternately) (Flashes)	The driver's door was opened and closed while the electronic key was not in the vehicle, the shift lever was not in P and the "ENGINE START STOP" switch was not turned off.	• Shift the shift lever to P. • Bring the elec-tronic key back into the vehicle.

<table>
<tr><th>Interior buzzer</th><th>Exterior buzzer</th><th>Warning message</th><th>Details</th><th>Correction procedure</th></tr>
<tr><td rowspan="2">Sounds once</td><td rowspan="2">Continuous</td><td rowspan="2">KEY DETECTED IN VEHICLE
(Flashes)</td><td>An attempt was made to lock the doors using the smart access system with push-button start while the electronic key was still inside the vehicle.</td><td rowspan="2">Retrieve the electronic key from the vehicle and lock the doors again.</td></tr>
<tr><td>An attempt was made to lock either front door by opening a door and putting the inside lock button into the lock position, then closing the door by pulling on the outside door handle with the electronic key still inside the vehicle.</td></tr>
</table>

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Sounds once	—	DEPRESS BRAKE PEDAL, TOUCH ENGINE SWITCH WITH KEY (Flashes)	• When the doors were unlocked with the mechanical key and then the “ENGINE START STOP” switch was pressed, the electronic key could not be detected in the vehicle. • The electronic key could not be detected in the vehicle even after the “ENGINE START STOP” switch was pressed two consecutive times.	Touch the electronic key to the “ENGINE START STOP” switch while depressing the brake pedal.
Sounds once	—	SHIFT TO P RANGE TO START (Flashes)	An attempt was made to start the engine with the shift lever in an incorrect position.	Shift the shift lever to P and start the engine.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Sounds once	—	SHIFT TO P RANGE AND PUSH ENGINE SWITCH TO TURN POWER OFF (Flashes)	An attempt was made to turn the “ENGINE START STOP” switch off when the shift lever was not in P.	To turn off the engine, first shift the shift lever to P and then turn the “ENGINE START STOP” switch off.
—	—	AUTO POWER OFF TO CONSERVE BATTERY	Power was turned off due to the automatic power off function.	Next time when starting the engine, increase the engine speed slightly and maintain that level for approximately 5 minutes to recharge the battery.
Sounds once	—	KEY BATTERY LOW	The electronic key has a low battery.	Replace the electronic key battery. (→P. 499)

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Sounds once	—	DEPRESS BRAKE PEDAL AND PUSH ENGINE SWITCH TO START (Flashes)	The driver's door was opened and closed with the "ENGINE START STOP" switch turned off and then the "ENGINE START STOP" switch was put in ACCESSORY mode twice without the engine being started.	Press the "ENGINE START STOP" switch while depressing the brake pedal.
			During an engine starting procedure in the event that the electronic key was not functioning properly (→P. 586), the "ENGINE START STOP" switch was touched with the electronic key.	Press the "ENGINE START STOP" switch within 10 seconds of the buzzer sounding.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Sounds once	—	STEERING LOCK ACTIVE (Flashes)	The steering lock could not be released within 3 seconds of the "ENGINE START STOP" switch being pressed.	Press the "ENGINE START STOP" switch while depressing the brake pedal and moving the steering wheel left and right.

■ **Warning light display in radar cruise mode (if equipped)**

In the following cases, the warning light may not be displayed even if vehicle-to-vehicle distance decreases:

- When your vehicle and the vehicle ahead are traveling at the same speed or the vehicle ahead is traveling more quickly than your vehicle
- When the vehicle ahead is traveling at a very low speed
- Immediately after cruise control speed is set
- At the instant the accelerator pedal is depressed

■ **After changing the engine oil (U.S.A. only)**

Make sure to reset the oil maintenance data. (→P. 470)

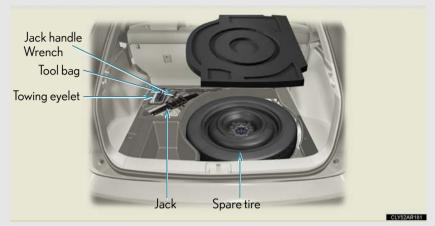
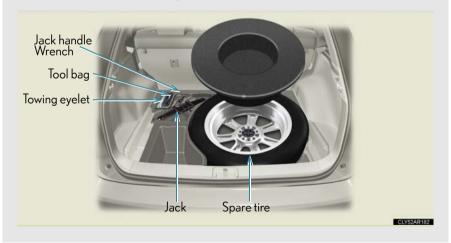
If you have a flat tire

Remove the flat tire and replace it with the spare provided.

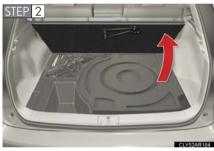
Before jacking up the vehicle

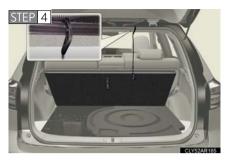
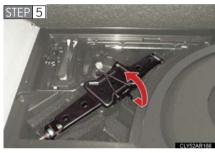
- Stop the vehicle on a hard, flat surface.
- Set the parking brake.
- Shift the shift lever to P.
- Vehicles with electronically modulated air suspension: Turn off the height control. (→P. 225)
- Stop the engine.
- Turn on the emergency flashers.

Location of the spare tire, jack and tools

▶ Vehicles with a compact spare tire

▶ Vehicles with a full-size spare tire

Taking out the jack

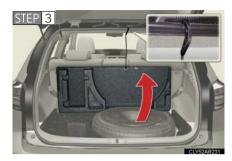
▶ Vehicles with a compact spare tire

Pull the lever upward to fold back the front part of the deck board.

Pull the folded deck board upright.

Pull on the attached hook to extend the string.

Use the hook to secure the deck board as shown in the illustration.

Remove the jack after removing the hook.

▶ Vehicles with a full-size spare tire

Pull the lever upward to fold back the front part of the deck board.

Pull on the attached hook to extend the string.

Pull the folded deck board upright, and use the hook to secure the deck board as shown in the illustration.

Remove the jack after removing the hook.

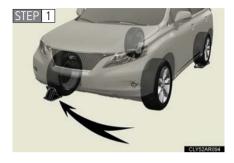
Taking out the spare tire

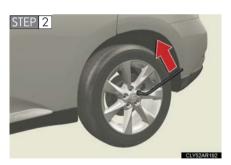
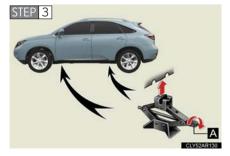
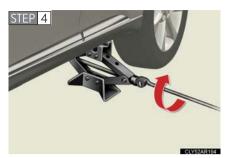
STEP 1 Lift up the deck board. (See "Taking out the jack" for details.)

STEP 2 Loosen the center fastener that secures the spare tire.

▶ Vehicles with a compact spare tire

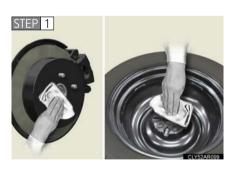
▶ Vehicles with a full-size spare tire

Replacing a flat tire

Chock the tires.

Flat tire		Wheel chock positions
Front	Left-hand side	Behind the rear right-hand side tire
	Right-hand side	Behind the rear left-hand side tire
Rear	Left-hand side	In front of the front right-hand side tire
	Right-hand side	In front of the front left-hand side tire

Slightly loosen the wheel nuts (one turn).

Turn the tire jack portion “A” by hand until the notch of the jack is in contact with the jack point.

Raise the vehicle until the tire is slightly raised off the ground.

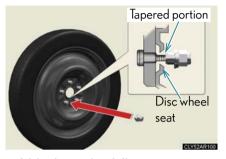
Remove all the wheel nuts and the tire.

When resting the tire on the ground, place the tire so that the wheel design faces up to avoid scratching the wheel surface.

Installing the spare tire

Remove any dirt or foreign matter from the wheel contact surface.

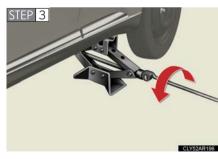
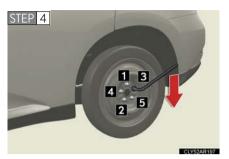
If foreign matter is on the wheel contact surface, the wheel nuts may loosen while the vehicle is in motion, causing the tire to come off.

STEP 2 Install the spare tire and loosely tighten each wheel nut by hand by approximately the same amount.

▶ Vehicles with a compact spare tire

Tighten the nuts until the tapered portion comes into loose contact with the disc wheel seat.

▶ Vehicles with a full-size spare tire

Turn the nuts until the washers come into contact with the wheel.

STEP 3

Lower the vehicle.

STEP 4 Firmly tighten each wheel nut two or three times in the order shown in the illustration.

Tightening torque:
76 ft•lbf (103 N•m, 10.5 kgf•m)

STEP 5 Stow the flat tire, tire jack and all tools.

■ **The compact spare tire**

● The compact spare tire is identified by the label "TEMPORARY USE ONLY" on the tire sidewall.
Use the compact spare tire temporarily, and only in an emergency.

● Make sure to check the tire inflation pressure of the compact spare tire. (→P. 606)

■ **When using the compact spare tire**

As the compact spare tire is not equipped with a tire pressure warning valve and transmitter, low inflation pressure of the spare tire will not be indicated by the tire pressure warning system. Also, if you replace the compact spare tire after the tire pressure warning light comes on, the light remains on.

■ **If you have a flat front tire on a road covered with snow or ice**

Install the compact spare tire on one of the rear wheels of the vehicle. Perform the following steps and fit tire chains to the front tires:

STEP 1 Replace a rear tire with the compact spare tire.

STEP 2 Replace the flat front tire with the tire removed from the rear of the vehicle.

STEP 3 Fit tire chains to the front tires.

■ **After completing the tire change**

The tire pressure warning system must be reset. (→P. 482)

CAUTION

■ Using the tire jack

Improper use of the tire jack may cause the vehicle to suddenly fall off the jack, leading to death or serious injury.

- Do not use the tire jack for any purpose other than replacing tires or installing and removing tire chains.
- Only use the tire jack that comes with this vehicle for replacing a flat tire.
  Do not use it on other vehicles, and do not use other tire jacks for replacing tires on this vehicle.
- Always check that the tire jack is securely set to the jack point.
- Do not put any part of your body under the vehicle is supported by the jack.
- Do not start or run the engine while your vehicle while it is supported by the jack.
- Do not raise the vehicle while someone is in it.
- When raising the vehicle, do not put an object on or under the jack.
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.
- Vehicles with electronically modulated air suspension: Be sure to turn off the height control and stop the engine.

Take particular care when lowering the vehicle to ensure that no one working on or near the vehicle may be injured.

■ Replacing a flat tire

Observe the following precautions to reduce the risk of death or serious injury:

- Do not touch the disc wheels or the area around the brakes immediately after the vehicle has been driven.
  After the vehicle has been driven the disc wheels and the area around the brakes will be extremely hot. Touching these areas with hands, feet or other body parts while changing a tire, etc. may result in burns.
- Never use oil or grease on the wheel bolts or wheel nuts.
  Oil and grease may cause the wheel nuts to be excessively tightened, leading to bolt or disc wheel damage. In addition, the oil or grease can cause the wheel nuts to loosen and the wheel may fall off, causing a serious accident. Remove any oil or grease from the wheel bolts or wheel nuts.

CAUTION

- Have the wheel nuts tightened with a torque wrench to 76 ft•lbf (103 N•m, 10.5 kgf•m) as soon as possible after changing wheels.
- When installing a tire, only use wheel nuts that have been specifically designed for that wheel.
- If there are any cracks or deformations in the bolt screws, nut threads or bolt holes of the wheel, have the vehicle inspected by your Lexus dealer.

Failure to follow these precautions could cause the wheel nuts to loosen and the tire to fall off, resulting in death or serious injury.

■ When using the compact spare tire

- Remember that the compact spare tire provided is specifically designed for use with your vehicle. Do not use your compact spare tire on another vehicle.
- Do not use more than one compact spare tire simultaneously.
- Replace the compact spare tire with a standard tire as soon as possible.
- Avoid sudden acceleration, deceleration and braking, as well as sharp cornering.

■ When the compact spare tire is attached

The vehicle speed may not be correctly detected, and the following systems may not operate correctly:

- ABS & Brake assist
- VSC
- Enhanced VSC
- TRAC
- VDIM
- Intuitive parking assist (if equipped)
- Navigation system (if equipped)
- Cruise control (if equipped)
- Dynamic radar cruise control (if equipped)
- Electronically modulated air suspension (if equipped)
- Pre-Collision System (if equipped)

CAUTION

Also, not only can the following system not be utilized fully, but it may even negatively affect the drive-train components:

- AWD system (if equipped)

■ Speed limit when using the compact spare tire

Do not drive at speeds in excess of 50 mph (80 km/h) when a compact spare tire is installed on the vehicle.

The compact spare tire is not designed for driving at high speeds. Failure to observe this precaution may lead to an accident causing death or serious injury.

 NOTICE

■ Do not drive the vehicle with a flat tire

Do not continue driving with a flat tire.
Driving even a short distance with a flat tire can damage the tire and the wheel beyond repair.

■ Be careful when driving over bumps with the compact spare tire installed on the vehicle.

The vehicle becomes lower when driving with the compact spare tire compared to when driving with standard tires. Be careful when driving over uneven road surfaces.

■ Driving with tire chains and the compact spare tire

Do not fit tire chains to the compact spare tire.
Tire chains may damage the vehicle body and adversely affect driving performance.

■ When replacing the tires

When removing or fitting the wheels, tires or the tire pressure warning valve and transmitter, contact your Lexus dealer as the tire pressure warning valve and transmitter may be damaged if not handled correctly.

■ To avoid damage to the tire pressure warning valves and transmitters

Do not use liquid sealants on flat tires.

If the engine will not start

If the engine will not start, even though correct starting procedures are being followed (→P. 151), consider each of the following points.

■ The engine will not start, even though the starter motor operates normally.

One of the following may be the cause of the problem:

- There may not be sufficient fuel in the vehicle's tank.
  Refuel the vehicle.
- The engine may be flooded.
  Try to restart the engine again following correct starting procedures. (→P. 151)
- There may be a malfunction in the engine immobilizer system. (→P. 100)

■ The starter motor turns over slowly, the interior lights and headlights are dim, or the horn does not sound or sounds at a low volume.

One of the following may be the cause of the problem:

- The battery may be discharged. (→P. 589)
- The battery terminal connections may be loose or corroded.

■ The starter motor does not turn over.

The engine starting system may be malfunctioning due to an electrical problem such as an open circuit or a blown fuse. However, an interim measure is available to start the engine. (→P. 583)

■ **The starter motor does not turn over, the interior lights and headlights do not turn on, or the horn does not sound.**

One of the following may be the cause of the problem:

- One or both of the battery terminals may be disconnected.
- The battery may be discharged. (→P. 589)
- There may be a malfunction in the steering lock system.

Contact your Lexus dealer if the problem cannot be repaired, or if repair procedures are unknown.

Emergency start function

When the engine does not start, the following steps can be used as an interim measure to start the engine if the “ENGINE START STOP” switch is functioning normally:

STEP 1 Set the parking brake.

STEP 2 Shift the shift lever to P.

STEP 3 Turn the “ENGINE START STOP” switch to ACCESSORY mode.

STEP 4 Press and hold the “ENGINE START STOP” switch for about 15 seconds while depressing the brake pedal firmly.

Even if the engine can be started using the above steps, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

If the shift lever cannot be shifted from P

If the shift lever cannot be shifted with your foot on the brake pedal, there may be a problem with the shift lock system (a system to prevent accidental operation of the shift lever). Have the vehicle inspected by your Lexus dealer immediately.

The following steps may be used as an emergency measure to ensure that the shift lever can be shifted:

STEP 1 Set the parking brake.

STEP 2 Turn the “ENGINE START STOP” switch to ACCESSORY mode.

STEP 3 Depress the brake pedal.

STEP 4

Pry the cover up with a flathead screwdriver or equivalent.

STEP 5

Press the shift lock override button.

The shift lever can be shifted while the button is pressed.

If you lose your keys

New genuine Lexus keys can be made by your Lexus dealer using the other keys and the key number stamped on your key number plate.

If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted (→P. 36) or the electronic key cannot be used because the battery is depleted, the smart access system with push-button start and wireless remote control cannot be used. In such cases, the doors can be opened or the engine can be started by following the procedure below.

Locking and unlocking the doors and key linked functions

Use the mechanical key (→P. 27) in order to perform the following operations (driver's door only):

1. Locks all the doors
2. Closes the windows and moon roof (turn and hold)
3. Unlocks the door

   Turning the key rearward unlocks the driver's door. Turning the key once again unlocks the other doors.

4. Opens the windows and moon roof (turn and hold)

Changing “ENGINE START STOP” switch modes and starting the engine

STEP 1 Ensure that the shift lever is in P and depress the brake pedal.

STEP 2

Touch the Lexus emblem side of the electronic key to the “ENGINE START STOP” switch.

If any of the doors is opened or closed while the key is being touched to the switch, an alarm will sound to indicate that the start function cannot detect the electronic key.

STEP 3 To change “ENGINE START STOP” switch modes: Within 10 seconds of the buzzer sounding, release the brake pedal and press the “ENGINE START STOP” switch. Modes can be changed each time the switch is pressed. (→P. 152)

To start the engine: Press the “ENGINE START STOP” switch within 10 seconds of the buzzer sounding, keeping the brake pedal depressed.

In the event that the “ENGINE START STOP” switch still cannot be operated, contact your Lexus dealer.

■ Stopping the engine

Shift the shift lever to P and press the “ENGINE START STOP” switch as you normally do when stopping the engine.

■ Replacing the key battery

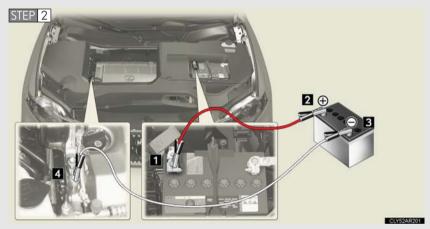
As the above procedure is a temporary measure, it is recommended that the electronic key battery be replaced immediately when the battery is depleted.
(→P. 499)

If the battery is discharged

The following procedures may be used to start the engine if the vehicle's battery is discharged.
You can call your Lexus dealer or a qualified repair shop.

If you have a set of jumper (or booster) cables and a second vehicle with a 12-volt battery, you can jump start your vehicle by following the steps below.

STEP 1 Open the hood. Remove the battery cover. (→P. 469)

STEP 2

Connect the jumper cables according to the following procedure:

1 Connect a positive jumper cable clamp to the positive (+) battery terminal on your vehicle

2 Connect a positive jumper cable clamp to the positive (+) battery terminal on the second vehicle

3 Connect a negative cable clamp to the negative (-) battery terminal on the second vehicle

4 Connect the clamp at the other end of the negative cable to a solid, stationary, unpainted metallic point away from the battery and any moving parts, as shown in the illustration.

STEP 3 Start the engine of the second vehicle. Increase the engine speed slightly and maintain that level for approximately 5 minutes to recharge the battery of your vehicle.

STEP 4 Open and close any of the doors with the “ENGINE START STOP” switch off.

STEP 5 Maintain the engine speed of the second vehicle and start the engine of your vehicle by turning the “ENGINE START STOP” switch to IGNITION ON mode.

STEP 6 Once the vehicle’s engine has started, remove the jumper cables in the exact reverse order from which they were connected.

Once the engine starts, have the vehicle inspected at your Lexus dealer as soon as possible.

■ Starting the engine when the battery is discharged

The engine cannot be started by push-starting.

■ To prevent battery discharge

- Turn off the headlights and the audio system while the engine is off.
- Turn off any unnecessary electrical components when the vehicle is running at a low speed for an extended period, such as in heavy traffic.

■ When the battery is removed or discharged

The power back door must be initialized. (→P. 634)

CAUTION

■ **Avoiding battery fires or explosions**

Observe the following precautions to prevent accidentally igniting the flammable gas that may be emitted from the battery:

● Make sure each jumper cable is connected to the correct terminal.

● Do not allow the "+" and "-" terminals of the jumper cables to come into contact with each other.

● Do not smoke, use matches, cigarette lighters or allow open flame near the battery.

■ **Battery precautions**

The battery contains poisonous and corrosive acidic electrolyte, while related parts contain lead and lead compounds. Observe the following precautions when handling the battery:

● When working with the battery, always wear safety glasses and take care not to allow any battery fluids (acid) to come into contact with skin, clothing or the vehicle body.

● Do not lean over the battery.

● In the event that battery fluid comes into contact with the skin or eyes, immediately wash the affected area with water and seek medical attention.
Place a wet sponge or cloth over the affected area until medical attention can be received.

● Always wash your hands after handling the battery support, terminals, and other battery-related parts.

● Do not allow children near the battery.

NOTICE

■ **When handling jumper cables**

When connecting the jumper cables, ensure that they do not become entangled in the cooling fans or belt.

If your vehicle overheats

If your engine overheats:

STEP 1 Stop the vehicle in a safe place and turn off the air conditioning system.

STEP 2 Check to see if steam is coming out from under the hood.

If you see steam:
Stop the engine. Carefully lift the hood after the steam subsides and then restart the engine.

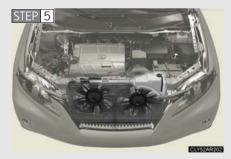
If you do not see steam:
Leave the engine running and carefully lift the hood.

STEP 3 Remove the engine compartment cover. (→P. 468)

STEP 4 Check to see if the cooling fan is operating.

If the fan is operating:
Wait until the temperature of the engine (shown on the instrument panel) begins to fall and then stop the engine.

If the fan is not operating:
Stop the engine immediately and call your Lexus dealer.

STEP 5

After the engine has cooled down sufficiently, check the engine coolant level and inspect the radiator core (radiator) for any leaks.

Add engine coolant if necessary.

Water can be used in an emergency if engine coolant is unavailable. (→P. 603)

Have the vehicle inspected at the nearest Lexus dealer as soon as possible.

■ Overheating

If you observe the following, your vehicle may be overheating:

- The engine coolant temperature gauge enters the red zone or a loss of power is experienced.
- Steam comes out from under the hood.

⚠ CAUTION

■ To prevent an accident or injury when inspecting under the hood of your vehicle

- If steam is seen coming from under the hood, do not open the hood until the steam has subsided. The engine compartment may be very hot, causing serious injuries such as burns.
- Keep hands and clothing away from the fans and drive belt while the engine is running.
- Do not loosen the radiator cap while the engine and radiator are hot.
  Serious injury, such as burns, may result from hot coolant and steam released under pressure.

When adding engine coolant

Wait until the engine has cooled down before adding engine coolant.
When adding coolant, do so slowly. Adding cool coolant to a hot engine too quickly can cause damage to the engine.

If the vehicle becomes stuck

Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt, or snow:

STEP 1 Stop the engine. Set the parking brake and shift the shift lever to P.

STEP 2 Remove the mud, snow, or sand from around the stuck tire.

STEP 3 Place wood, stones or some other material under the tires to help provide traction.

STEP 4 Restart the engine.

STEP 5 AWD models: Active all-wheel drive lock mode (→P. 241)

STEP 6 Shift the shift lever to the D or R position and carefully apply the accelerator to free the vehicle.

Turn off the TRAC and VSC systems if these functions are hampering your attempts to free the vehicle. (→ P. 237)

CAUTION

When attempting to free a stuck vehicle

If you choose to push the vehicle back and forth to free it, make sure the surrounding area is clear to avoid striking other vehicles, objects or people. The vehicle may also lunge forward or lunge back suddenly as it becomes free. Use extreme caution.

When shifting the shift lever

Be careful not to shift the shift lever with the accelerator pedal depressed.
This may lead to unexpected rapid acceleration of the vehicle that may cause an accident and resulting in death or serious injury.

NOTICE

To avoid damage to the transmission and other components

- Avoid spinning the wheels.
- If the vehicle remains stuck even after these procedures are performed, the vehicle may require towing to be freed.

If your vehicle has to be stopped in an emergency

Only in an emergency, such as if it becomes impossible to stop the vehicle in the normal way, stop the vehicle using the following procedure:

STEP 1 Steadily step on the brake pedal with both feet and firmly depress it.

Do not pump the brake pedal repeatedly as this will increase the effort required to slow the vehicle.

STEP 2 Shift the shift lever to N.

▶ If the shift lever is shifted to N

STEP 3 After slowing down, stop the vehicle in a safe place by the road.

STEP 4 Stop the engine.

▶ If the shift lever cannot be shifted to N

STEP 3 Keep depressing the brake pedal with both feet to reduce vehicle speed as much as possible.

STEP 4

Stop the engine by pressing and holding the “ENGINE START STOP” switch for 3 consecutive seconds or more.

STEP 5 Stop the vehicle in a safe place by the road.

CAUTION

■ **If the engine has to be turned off while driving**

Power assist for the brakes and steering wheel will be lost, making the brake pedal harder to depress and the steering wheel heavier to turn. Decelerate as much as possible before turning off the engine.